CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SAN FRANCISCO BAY REGION

ORDER NO. 84-39

NPDES NO. CA0037826

REISSUING WASTE DISCHARGE REQUIREMENTS FOR:

RODEO SANITARY DISTRICT
CONTRA COSTA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

1. The Rodeo Sanitary District, (hereinafter called the Discharger), submitted a Report of Waste Discharge dated March 21, 1984 for reissuance of NPDES Permit No. CA0037826.

2. The Discharger presently discharges an average dry weather flow of 0.8 million gallons per day (MGD) from its activated sludge plant which has a dry weather design capacity of 1.14 MGD. The plant treats domestic wastewater from the Rodeo Sanitary District. The treated wastewater is discharged into San Pablo Bay, a water of the State and of the United States, through a submerged diffuser about 3600 feet offshore at a depth of 18 feet below mean lower low water, [latitude 38 deg., 03 min., 06 sec.] [longitude 122 deg., 15 min., 55 sec.], which is used jointly by Rodeo and the cities of Pinole and Hercules.

3. The Discharger is presently governed by Waste Discharge Requirements Order No. 79-75, which allows discharge into San Pablo Bay.

4. There are viable shellfish beds in San Pablo Bay that could be affected by the discharge of wastewater. To protect the shellfish beds the Board has required, and will continue to require, the wastewater to receive an initial dilution of at least 45:1 in the receiving water.

5. The Board adopted a revised water quality control plan for the San Francisco Bay Region (Basin Plan) on July 21, 1982. The Basin Plan contains water quality objectives for San Pablo Bay and contiguous waters.

6. The beneficial uses of San Pablo Bay and contiguous water bodies are:

    - o Water Contact Recreation
    - o Non-Contact Water Recreation
    - o Navigation
    - o Commercial and Sport Fishing
    - o Wildlife Habitat
    - o Fish Spawning and Migration
    - o Preservation of Rare and Endangered Species
    - o Shellfish Harvesting
    - o Industrial Service Supply
    - o Estuarine Habitat

7. An Operations and Maintenance Manual is maintained by the discharger for purposes of providing plant and regulatory personnel with a source of information describing all equipment, faciliites, and recommended operating strategies, process control monitoring, and maintenance activities. In order to remain a useful and relevant document, this manual should be kept updated to reflect significant changes in plant facilities or activities.

8. This Order serves as an NPDES permit, adoption of which is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.

9. The Discharger and interested agencies and persons have been notified of the Board's intent to reissue requirements for the existing discharge and have been provided with the opportunity for a public hearing and the opportunity to submit their written views and recommendations.

10. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, that the Discharger in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act as amended and regulations and guidelines adopted thereunder shall comply with the following:

A. Discharge Prohibitions

1. Bypass or overflow of untreated or partially treated wastewater to waters of the State either at the treatment plant or from any of the collection system and pump stations tributary to the treatment plant is prohibited.

2. The average dry weather flow shall not exceed 1.14 mgd. Average shall be determined over three consecutive months each year.

3. Discharge at any point at which the wastewater does not receive an initial dilution of at least 45:1 is prohibited.

B. Effluent Limitations

1. Effluent discharged shall not exceed the following limits:

	Constituents	Units	30-day Average	7-day Average	Maximum Daily	Instantaneous Maximum
a.	Settleable Matter	ml/l-hr	0.1		--	0.2
b.	BOD_5 or	mg/l	30	45	60	
	Carbonaceous BOD_5 (2)	mg/l	25	40	50	--
c.	Total Suspended Solids	mg/l	30	45	60	--
d.	Oil & Grease	mg/l	10		20	--
e.	Total Chlorine Residual (1)	mg/l	--	--	--	0.0

(1) Requirements defined below the limit of detection in standard test methods.

(2) Effective upon its promulgation in a new secondary treatment definition.

2. The arithmetic mean of the biochemical oxygen demand (5-day, 20°C) and suspended solids values, by weight for effluent samples collected in a period of 30 consecutive calendar days shall not exceed 15 percent of the arithmetic mean of the respective values, by weight, for influent samples collected approximately the same times during the same period (85 percent removal).

3. The pH of the discharge shall not exceed 9.0, nor be less than 6.0.

4. The survival of test organisms acceptable to the Executive Officer in 96-hour bioassays of the effluent shall achieve a 90 percentile value of not less than 50 percent survival based on the ten most recent consecutive samples.

5. Representative samples of the effluent shall not exceed the following limits: (1)

Constituent	Unit of Measurement	6-month Median	Daily Maximum
Arsenic	mg/l	0.01	0.02
Cadmium	mg/l	0.02	0.03
Total Chromium	mg/l	0.005	0.01
Copper	mg/l	0.2	0.3
Lead	mg/l	0.1	0.2
Mercury	mg/l	0.001	0.002
Nickel	mg/l	0.1	0.2
Silver	mg/l	0.02	0.04
Zinc	mg/l	0.3	0.5
Cyanide	mg/l	0.1	0.2
Phenolic Compounds	mg/l	0.5	1.0
Total Identifiable Chlorinated Hydrocarbons (2)	mg/l	0.002	0.004

(1) These limits are intended to be achieved through secondary treatment, source control and application of pretreatment standards.

(2) Total Identifiable Chlorinated Hydrocarbons shall be measured by summing the individual concentrations of DDT, DDD, DDE, aldrin, BHC, chlordane, endrin, heptachlor, lindane, dieldrin, polychlorinated biphenyls, and other identifiable chlorinated hydrocarbons.

6. The running median value for the MPN of total coliform in any five (5) consecutive effluent samples shall not exceed 240 coliform organisms per 100 milliliters. Any single sample shall not exceed 10,000 MPN/100 ml.

C. Receiving Water Limitations

1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place:

   a. Floating, suspended, or deposited macroscopic particulate matter or foam;

   b. Bottom deposits or aquatic growths;

   c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;

   d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;

   e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:

a. Dissolved oxygen	5.0 mg/l minimum Median of any three consecutive months shall not be less than 80 percent saturation. When natural factors cause lesser concentration(s) than those specified above, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
b. Dissolved Sulfide	0.1 mg/l maximum
c. pH	Variation from natural ambient pH by more than 0.5 pH units.
d. Un-ionized ammonia	0.025 mg/l as N Annual Median 0.4 mg/l as N Maximum

3. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

D. Provisions

1. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 79-75. Order No. 79-75 is hereby rescinded.

2. Where concentration limitations in mg/l are contained in this permit, the following mass emission limitations shall also apply as follows:

   Mass Emission Limit in (lbs/day), (kg/day) = Concentration limit in mg/l x (8.34), (3.79) x Actual Flow in mgd averaged over the time interval to which the limit applies.

3. The discharger shall comply with all sections of this Order immediately upon adoption.

4. The discharger shall review and update his Operations and Maintenance Manual annually, or in the event of significant facility or process changes, shortly after such changes have occurred. Annual revisions, or letters stating that no changes are needed, shall be submitted to the Regional Board by April 15 of each year. A time schedule for completion of the initial revision shall be submitted by September 30, 1984. Documentation of operator input and review shall accompany each annual update.

5. The discharger shall review and update by January 31 annually its contingency plan as required by Board Resolution No. 74-10. The discharge of pollutants in violation of this Order where the discharger has failed to develop and/or implement a contingency plan will be basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the California Water Code.

6. The discharger shall comply with the self-monitoring program as adopted by the Board and as may be amended by the Executive Officer.

7. The discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated April 1977. Standard Provision C.2. is revised to read as follows:

   2. The "30-day, or 7-day, average" discharge is the total discharge by weight during 30, or 7, consecutive calendar day periods, respectively, divided by the number of days in the period that the facility was discharging. Where less than daily sampling is required by this permit, the 30-day, or 7-day, average discharge shall be determined by the summation of all the measured discharges by weight divided by the number of days during the 30, or 7, consecutive calendar day period when the measurements were made. For other than 7-day or 30-day periods, compliance shall be based on the average of all measurements made during the specified period.

8. This Order expires July 18, 1989. The discharger must file a report of waste discharge in accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative Code not later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements.

9. This Order shall serve as a National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective 10 days after date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

I, Roger B. James, Executive Officer do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on July 18, 1984.

ROGER B. JAMES
Executive Officer

Attachments:

Standard Provisions &
Reporting Requirements, April 1977
Self-Monitoring Program
Resolution 74-10

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM
FOR

Rodeo Sanitary District

Contra Cost County

NPDES NO. CA0037826

ORDER NO. 84-39

CONSISTS OF

PART A, dated January 1978

AND

PART B

PART B

I. DESCRIPTION OF SAMPLING STATIONS AND SCHEDULE OF SAMPLING, ANALYSES AND OBSERVATIONS

A. INFLUENT AND INTAKE

Station	Description
A-1	At any point in the treatment facilities headworks at which all waste tributary to the system is present and proceding any phase of treatment.

B. EFFLUENT

Station	Description
E-001	At any point in the outfall from the treatment facilities between the point of discharge or mixing with Pinole wastewater and the point at which all waste tributary to that outfall is present. (May be the same as E-001-D)
E-001-D	At any point in the disinfection facilities for Waste E-001, at which point adequate contract with the disinfectant is assured.
E-001-S	At any point in the treatment and disposal facilities following dechlorination.

C. LAND OBSERVATIONS

Station	Description
P-1 through P-"n"	Located at the corners and midpoints of the perimeter fenceline surrounding the treatment facilities. (A sketch showing the location of these stations will accompany each report.)

D. OVERFLOWS AND BYPASSES

Station	Description
O-1 through O-"n"	Bypass or overflows from manholes, pump stations or collection system. Note: Initial SMP report to include map and description of each known bypass or overflow location. Reporting - Shall be submitted monthly and include date, time, and period of each overflow or bypass.

II. SCHEDULE OF SAMPLING MEASUREMENTS AND ANALYSIS

The schedule of sampling, measurements and analysis shall be that given in Table 1.

III. MODIFICATIONS TO "PART A"

A. This monitoring program does not include the following sections of Part A, dated January 1978: C.3, C.4, D.3.

I, Roger B. James, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 84-39.

2. Is effective on the date indicated below.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger, and revisions will be ordered by the Executive Officer.

Roger B. James
Executive Officer

Effective Date _____

Attachments:
Table I
Form A

TABLE 1

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS (1)

Sampling Station	A-001		E-001		E-001-D		E-001-S		P	O			
TYPE OF SAMPLE	G	C-24	G	C-24	Cont	G	Cont	C-24	O	O			
Flow Rate (mgd)		D			D								
BOD, 5-day, 20° C, or COD (mg/l & kg/day)		W		W									
Chlorine Residual & Dosage (mg/l & kg/day)					Cont	or 2H							
Settleable Matter (ml/l-hr. & cu. ft./day)			D										
Total Suspended Matter (mg/l & kg/day)		W		W									
Oil & Grease (mg/l & kg/day)			W (2)										
Coliform (Total or Fecal) (MPN/100 ml) per req'd						3/W							
Fish Toxicity, 96-hr. TL_m % Survival in undiluted waste								M					
Ammonia Nitrogen (mg/l & kg/day)				M									
Nitrate Nitrogen (mg/l & kg/day)													
Nitrite Nitrogen (mg/l & kg/day)													
Total Organic Nitrogen (mg/l & kg/day)													
Total Phosphate (mg/l & kg/day)													
Turbidity (Jackson Turbidity Units)													
pH (units)			D										
Dissolved Oxygen (mg/l and % Saturation)			D										
Temperature (°C)			D										
Apparent Color (color units)													
Secchi Disc (inches)													
Sulfides (If DO < 5.0 mg/l) Total & Dissolved (mg/l)			W										
Arsenic (mg/l & kg/day)				Y									
Cadmium (mg/l & kg/day)				Y									
Chromium, Total (mg/l & kg/day)				Y									
Copper (mg/l & kg/day)				Y									
Cyanide (mg/l & kg/day)				Y									
Silver (mg/l & kg/day				Y									
Lead (mg/l & kg/day)				Y									

TABLE I (continued)
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	A-001		E-001		E-001-D		E-001-S		P	O			
TYPE OF SAMPLE	G	C-24	G	C-24	Cont	G	Cont	C-24	O	O			
Mercury (mg/l & kg/day)				Y									
Nickel (mg/l & kg/day)				Y									
Zinc (mg/l & kg/day)				Y									
PHENOLIC COMPOUNDS (mg/l & kg/day)				Y									
All Applicable Standard Observations									W	E			
Bottom Sediment Analyses and Observations													
Total Identifiable Chlorinated Hydrocarbons (mg/l & kg/day)				Y									
Chlorine residual(3) (mg/l)							Cont	or 2H					

LEGEND FOR TABLE

TYPES OF SAMPLES

G = grab sample
C-24 = composite sample - 24-hour
C-X = composite sample - X hours (used when discharge does not continue for 24-hour period)
Cont = continuous sampling
DI = depth-integrated sample
BS = bottom sediment sample
O = observation

TYPES OF STATIONS

I = intake and/or water supply stations
A = treatment facility influent stations
E = waste effluent stations
C = receiving water stations
P = treatment facilities perimeter stations
L = basin and/or pond levee stations
B = bottom sediment stations
G = groundwater stations

FREQUENCY OF SAMPLING

E = each occurence
H = once each hour
D = once each day
W = once each week
M = once each month.
Y = once each year

2/H = twice per hour
2/W = 2 days per week
5/W = 5 days per week
2/M = 2 days per month
2/Y = once in March and once in September
Q = quarterly, once in March, June, Sept. and December

2H = every 2 hou
2D = every 2 day
2W = every 2 week
3M = every 3 mont
Cont = continuous

FOOTNOTES FOR TABLE I

(1) During any day when bypassing occurs from any treatment unit(s) in the plant, the monitoring program for the effluent shall include the following in addition to the above schedule for sampling, measurement and analyses:

1. Composite sample for BOD, total suspended solids, oil and grease.
2. Grab sample for Coliform (Total and Fecal), Settleable matter,

(2) Oil and grease sampling shall consist of 3 grab samples taken at equal intervals during the sampling day, with each grab being collected in a glass container. A composite shall be made using equal volumes of each grab. Each glass container used for sample collection or mixing shall be throughly rinsed with solvent as soon as possible after use, and the solvent rinsings shall be added to the composite wastewater sample for extraction and analysis.

(3) Chlorine residual following dechlorination shall be reported using the attached form A or equivalent.

Month _____

Year _____

FORM A

CHLORINE RESIDUAL

	Grab Sample mg/l		Corresponding Analyzer Reading mg/l		Number of Analyzer Readings	Number of Non-zero Readings mg/l	Maximum Analyzer Reading mg/l	Average Value of Non-zero mg/l
	AM	PM	AM	PM				
1								
2								
3								
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